Appl. No. 09/215,421 Amdt. dated August 13, 2003 Reply to Office Action of February 13, 2003

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

- 1. (Canceled).
- 2. (Currently amended) The test set of claim ½ 28 wherein the line qualification includes transmission line tests, and wherein the transmission line tests includes at least one of digital multimeter tests, transmission impairment measurement set (TIMS) tests, and time domain reflection (TDR) tests.
- 3. (Currently amended) The test set of claim 4 28 wherein the display unit is a graphical display unit.
- 4. (Currently amended) The test set of claim 3 wherein the graphical display unit shows selected ones of the test results data in a graphical form.
  - 5-6. (Canceled).
- 7. (Currently amended) The test set of claim 6 28 wherein the predetermined transmission technology is one of E1, T1, ISDN, DSL, HDSL, ADSL, and xDSL. xDSL communications network is one of a DSL communications network, a high-speed DSL communications network, and an asymmetric DSL communications network.
  - 8-17. (Canceled).

**PATENT** 

Appl. No. 09/215,421 Amdt. dated August 13, 2003 Reply to Office Action of February 13, 2003

18. (Currently amended) The test set of claim 16 28 wherein the xDSL connectivity testing test data includes bit-error-rate testing test data and loopback testing test data.

19-24. (Canceled).

25. (Currently amended) The test set of claim 22 28 wherein the xDSL modern module determines a maximum transmission rate on the xDSL communications network based on the processed results. xDSL connectivity test data.

26-27. (Canceled).

28. (Currently amended) A test set for testing a digital subscriber line (xDSL) communications network, comprising:

at least one xDSL signal input port that connects the test set to the xDSL communications network;

line qualification test circuitry, coupled to the at least one xDSL signal input port, that performs line qualification testing on the xDSL communications network;

an xDSL modem module that attaches removably to the test set, wherein the xDSL modem module emulates a particular type of xDSL modem, enabling the test set to test the xDSL communications network in accordance with the particular type of xDSL modem;

an internal bus that couples the line qualification test circuitry and the xDSL modem module;

a processor, coupled to the internal bus, that operates with the line qualification test circuitry to selectively generate line qualification test data, and with the xDSL modem module to selectively generate xDSL connectivity test data, and that selectively processes the line qualification test data and the xDSL connectivity test data, in accordance with a user selection; and



Appl. No. 09/215,421 Amdt. dated August 13, 2003 Reply to Office Action of February 13, 2003

a display unit, coupled to the internal bus, that selectively displays one or more of the line qualification test data and the xDSL connectivity <u>test</u> data in accordance with the user selection,

wherein the test set stores a software program and executes selected portions of the software program as determined by the xDSL modem module emulating the particular type of xDSL modem.

- 29. (Previously presented) The test set of claim 28, wherein the xDSL modem module is configured as a plug-in card.
- 30. (Previously presented) The test set of claim 28, wherein the xDSL modem module includes a stored identification value, wherein the test set reads the stored identification value when the xDSL modem module is attached to the test set, and wherein the test set performs xDSL tests that relate to the stored identification value.
  - 31. (Canceled).
- 32. (Currently amended) A test set for testing a digital subscriber line (xDSL) communications network, comprising:

at least one xDSL signal input port that connects the test set to the xDSL communications network;

line qualification test circuitry, coupled to the at least one xDSL signal input port, that performs line qualification testing on the xDSL communications network;

an xDSL modem module that attaches removably to the test set, wherein the xDSL modem module emulates a particular type of xDSL modem, enabling the test set to test the xDSL communications network in accordance with the particular type of xDSL modem;

an internal bus that couples the line qualification test circuitry and the xDSL modem module;

Appl. No. 09/215,421 Amdt. dated August 13, 2003 Reply to Office Action of February 13, 2003

a processor, coupled to the internal bus, that operates with the line qualification test circuitry to selectively generate line qualification test data, and with the xDSL modem module to selectively generate xDSL connectivity test data, and that selectively processes the line qualification test data and the xDSL connectivity test data, in accordance with a user selection; and

a display unit, coupled to the internal bus, that selectively displays one or more of the line qualification test data and the xDSL connectivity <u>test</u> data in accordance with the user selection,

wherein the test set is configured as a master test set and a second test set is configured as a slave test set, wherein the xDSL modem module of the master test set and the xDSL modem module of the slave test set both emulate the particular type of xDSL modem, and wherein the master test set and the slave test set each perform respective functions to test the xDSL communications network.

- 33. (Previously presented) The test set of claim 28, wherein the xDSL modem module emulates a central office xDSL modem, and wherein the test set is configured to test respective ends of an xDSL loop with a second test set that includes a respective xDSL modem module that emulates a remote xDSL modem.
- 34. (Previously presented) The test set of claim 28, wherein the test set is configured to test respective ends of an xDSL loop with one of a central office xDSL modem and a remote xDSL modem that also corresponds to the particular type of xDSL modem.
- 35. (Previously presented) The test set of claim 32, wherein the xDSL modem module is configured as a plug-in card.
- 36. (Previously presented) The test set of claim 32, wherein the xDSL modem module includes a stored identification value, wherein the test set reads the stored identification

**PATENT** 

Appl. No. 09/215,421 Amdt. dated August 13, 2003 Reply to Office Action of February 13, 2003

value when the xDSL modem module is attached to the test set, and wherein the test set performs xDSL tests that relate to the stored identification value.

- 37. (New) The test set of claim 32 wherein the line qualification includes transmission line tests, and wherein the transmission line tests includes at least one of digital multimeter tests, transmission impairment measurement set (TIMS) tests, and time domain reflection (TDR) tests.
- 38. (New) The test set of claim 32 wherein the display unit is a graphical display unit.
- 39. (New) The test set of claim 38 wherein the graphical display unit shows selected ones of the test data in a graphical form.
- 40. (New) The test set of claim 32 wherein the xDSL communications network is one of a DSL communications network, a high-speed DSL communications network, and an asymmetric DSL communications network.
- 41. (New) The test set of claim 32 wherein the xDSL connectivity test data includes bit-error-rate test data and loopback test data.
- 42. (New) The test set of claim 32 wherein the xDSL modem module determines a maximum transmission rate on the xDSL communications network based on the xDSL connectivity test data.